5318 Alexa Road

Charlotte, NC 28277-0518

Office: (704) 246-7266

Cell:

(412) 720-8549

Fax:

(980) 339-3017

Email: lbrausch@brauschenv.com



Via Electronic and First-Class Mail

May 9, 2018

Ms. Shari Lynn Kolak Remedial Project Manager Superfund Division U.S. Environmental Protection Agency, Region 5 77 West Jackson Boulevard, SRF-5J Chicago, IL 60604-3507

Re: **Monthly Progress Report for April 2018** 

Remedial Investigation and Feasibility Study

Lake Calumet Cluster Site, Operable Unit 2, Chicago, Illinois

Dear Ms. Kolak:

The Respondents submit this monthly progress report to the U.S. Environmental Protection Agency (USEPA), Region 5, pursuant to Paragraph 46 of the Administrative Settlement Agreement and Order on Consent (AOC) and attached Statement of Work for the Operable Unit 2 Remedial Investigation and Feasibility Study (RI/FS) at the Lake Calumet Cluster Site in Chicago, Illinois (the Site). This progress report summarizes efforts by the Respondents to fulfill the requirements of the AOC during the April 2018 reporting period.

#### 1. **Activities Completed During This Reporting Period**

Α. On April 10, 2018, the Respondents submitted the March 2018 monthly progress report to USEPA with copies to the Illinois Environmental Protection Agency (IEPA).

#### 2. Results of Sampling and Tests and Other Data

A. The Respondents submitted no sampling results or other test data during the April 2018 reporting period.

A. The Respondents submitted no work plans, procedures, or other deliverables during the April 2018 reporting period.

### 4. Actions Projected for the Next Reporting Period

A. The Respondents will follow up the October 18, 2017 meeting and December 22, 2017 correspondence with USEPA and IEPA to address any remaining technical issues and confirm the path forward to complete the RI and risk assessments.

## 5. Progress and Schedule Report

- A. On behalf of the Respondents, Arcadis U.S., Inc. (Arcadis) has completed the RI Site characterization studies as defined in the RI/FS Work Plan, as well as ancillary Site investigation activities (e.g., seep inspection, light non-aqueous phase liquid sampling).
- B. The schedule date for completing the RI was extended to accommodate four rounds of quarterly groundwater sampling rather than the one round envisioned in the schedule submitted with the RI/FS Work Plan.
- C. Pending the agreement on next steps (see Item 4.A. above), the Respondents will work with USEPA to update the schedule for completing the RI and risk assessments.

We trust that this submittal satisfies your requirements at this time. If you have questions regarding this monthly progress report or related project matters, please do not hesitate to contact me.

Respectfully submitted,

Leo M. Brausch Project Coordinator

LMB:

cc (via email):

S. M. Franzetti, Esq.

J. Kratzmeyer, Arcadis

P. Lake, IEPA (plus two hard copies)

5318 Alexa Road

Charlotte, NC 28277-0518

(704) 246-7266

Cell:

(412) 720-8549

Fax:

(980) 339-3017

Email:

lbrausch@brauschenv.com

#### Via Electronic and First-Class Mail

August 14, 2018

Ms. Shari Lynn Kolak Remedial Project Manager Superfund Division U.S. Environmental Protection Agency, Region 5 77 West Jackson Boulevard, SRF-5J Chicago, IL 60604-3507

Re: **Monthly Progress Report for July 2018** 

Remedial Investigation and Feasibility Study

Lake Calumet Cluster Site, Operable Unit 2, Chicago, Illinois

Dear Ms. Kolak:

The Respondents submit this monthly progress report to the U.S. Environmental Protection Agency (USEPA), Region 5, pursuant to Paragraph 46 of the Administrative Settlement Agreement and Order on Consent (AOC) and attached Statement of Work for the Operable Unit 2 (OU2) Remedial Investigation and Feasibility Study (RI/FS) at the Lake Calumet Cluster Site in Chicago, Illinois (the Site). This progress report summarizes efforts by the Respondents to fulfill the requirements of the AOC during the July 2018 reporting period.

#### **Activities Completed During This Reporting Period** 1.

- A. On July 9, 2018, the Respondents submitted the June 2018 monthly progress report to USEPA with copies to the Illinois Environmental Protection Agency (IEPA).
- B. On July 10, 2018, representatives of the Respondents met by conference call with USEPA and IEPA to further discuss the comments received May 17, 2018 on the OU2 Groundwater Assessment Technical Memorandum dated July 24, 2017.

#### 2. Results of Sampling and Tests and Other Data

A. The Respondents submitted no sampling results or other test data during the July 2018 reporting period.

A. The Respondents submitted no work plans, procedures, or other deliverables during the July 2018 reporting period.

#### 4. Actions Projected for the Next Reporting Period

A. The Respondents plan to follow up the July 10, 2018 conference call to address remaining technical issues and define the path forward for completing the RI and risk assessments. As part of this effort, Arcadis U.S., Inc. (Arcadis) will prepare a work plan for surface water sampling in Indian Ridge Marsh to assess the potential impacts to the marsh from constituents in groundwater emanating from the Site.

### 5. Progress and Schedule Report

- A. On behalf of the Respondents, Arcadis has completed the RI Site characterization studies as defined in the RI/FS Work Plan, as well as ancillary Site investigation activities (e.g., seep inspection, light non-aqueous phase liquid sampling).
- B. The schedule date for completing the RI was extended to accommodate four rounds of quarterly groundwater sampling rather than the one round envisioned in the schedule submitted with the RI/FS Work Plan.
- C. Pending the agreement on next steps (see Item 4.A. above), the Respondents will work with USEPA to update the schedule for completing the RI and risk assessments.

We trust that this submittal satisfies your requirements at this time. If you have questions regarding this monthly progress report or related project matters, please do not hesitate to contact me.

Respectfully submitted,

Leó M. Brausch Project Coordinator

LMB:

Ms. Shari Lynn Kolak August 14, 2018 Page 3

## cc (via email):

- S. M. Franzetti, Esq.
- J. Kratzmeyer, Arcadis
- P. Lake, IEPA (plus two hard copies) LCCS Technical Committee

5318 Alexa Road

Charlotte, NC 28277-0518

Office: (704) 246-7266

Cell:

(412) 720-8549

Fax:

(980) 339-3017

Email:

Ibrausch@brauschenv.com

## Via Electronic and First-Class Mail

September 12, 2018

Ms. Shari Lynn Kolak Remedial Project Manager Superfund Division U.S. Environmental Protection Agency, Region 5 77 West Jackson Boulevard, SRF-5J Chicago, IL 60604-3507

Re: Monthly Progress Report for August 2018

Remedial Investigation and Feasibility Study

Lake Calumet Cluster Site, Operable Unit 2, Chicago, Illinois

Dear Ms. Kolak:

The Respondents submit this monthly progress report to the U.S. Environmental Protection Agency (USEPA), Region 5, pursuant to Paragraph 46 of the Administrative Settlement Agreement and Order on Consent (AOC) and attached Statement of Work for the Operable Unit 2 (OU2) Remedial Investigation and Feasibility Study (RI/FS) at the Lake Calumet Cluster Site in Chicago, Illinois (the Site). This progress report summarizes efforts by the Respondents to fulfill the requirements of the AOC during the August 2018 reporting period.

#### 1. **Activities Completed During This Reporting Period**

- A. On August 14, 2018, the Respondents submitted the July 2018 monthly progress report to USEPA with copies to the Illinois Environmental Protection Agency (IEPA).
- B. On August 15 and August 22, 2018, IEPA replied to the Respondents' request under the Freedom of Information Act (FOIA) for pertinent groundwater information from the adjacent Paxton I, Paxton II, and Land & Lakes Landfills.
- C. On August 16, 2018, the Respondents forwarded to USEPA and IEPA a U.S. Geological Survey (USGS) technical publication presenting hydrogeology and groundwater quality information for wells near tunnels constructed for the Tunnel

- and Reservoir Plan (TARP) System, including the tunnel beneath Torrence Avenue near the Site.
- D. On August 31, 2018, the Respondents submitted to USEPA and IEPA a work plan prepared by Arcadis U.S., Inc. (Arcadis) for surface water sampling in Indian Ridge Marsh to assess the potential impacts to the marsh from constituents in groundwater emanating from the Site.

#### 2. Results of Sampling and Tests and Other Data

A. The Respondents submitted no sampling results or other Site testing data during the August 2018 reporting period.

#### 3. Work Plans, Procedures, and Deliverables

- A. On August 31, 2018, the Respondents submitted a work plan for surface water sampling in Indiana Ridge March.
- B. The Respondents submitted no other work plans, procedures, or deliverables during the August 2018 reporting period.

#### 4. Actions Projected for the Next Reporting Period

- A. The Respondents will follow up with USEPA and IEPA to address remaining technical issues and define the path forward for completing the RI and risk assessments.
- B. As part of this effort, Arcadis will compile regional and Site-specific geologic and hydrogeologic information about the confining layer and groundwater in deeper units below the confining layer.
- C. Arcadis will also review and evaluate the information provided by IEPA in reply to the Respondents' FOIA request.

#### 5. Progress and Schedule Report

- A. On behalf of the Respondents, Arcadis has completed the RI Site characterization studies as defined in the RI/FS Work Plan, as well as ancillary Site investigation activities (e.g., seep inspection, light non-aqueous phase liquid sampling).
- B. The schedule date for completing the RI was extended to accommodate four rounds of quarterly groundwater sampling rather than the one round envisioned in the schedule submitted with the RI/FS Work Plan.

C. Pending the agreement on next steps (see Item 4.A. above), the Respondents will work with USEPA to update the schedule for completing the RI and risk assessments.

\* \* \* \*

We trust that this submittal satisfies your requirements at this time. If you have questions regarding this monthly progress report or related project matters, please do not hesitate to contact me.

Respectfully submitted,

Leo M. Brausch Project Coordinator

LMB:

cc (via email):

S. M. Franzetti, Esq.

J. Kratzmeyer, Arcadis

P. Lake, IEPA (plus two hard copies)

5318 Alexa Road

Charlotte, NC 28277-0518

Office: (704) 246-7266

Cell:

(412) 720-8549

Fax:

(980) 339-3017

Email:

lbrausch@brauschenv.com

#### Via Electronic and First-Class Mail

October 10, 2018

Ms. Shari Lynn Kolak Remedial Project Manager Superfund Division U.S. Environmental Protection Agency, Region 5 77 West Jackson Boulevard, SRF-5J Chicago, IL 60604-3507

Re: **Monthly Progress Report for September 2018** 

Remedial Investigation and Feasibility Study

Lake Calumet Cluster Site, Operable Unit 2, Chicago, Illinois

Dear Ms. Kolak:

The Respondents submit this monthly progress report to the U.S. Environmental Protection Agency (USEPA), Region 5, pursuant to Paragraph 46 of the Administrative Settlement Agreement and Order on Consent (AOC) and attached Statement of Work for the Operable Unit 2 (OU2) Remedial Investigation and Feasibility Study (RI/FS) at the Lake Calumet Cluster Site in Chicago, Illinois (the Site). This progress report summarizes efforts by the Respondents to fulfill the requirements of the AOC during the September 2018 reporting period.

#### 1. **Activities Completed During This Reporting Period**

A. On September 12, 2018, the Respondents submitted the August 2018 monthly progress report to USEPA with copies to the Illinois Environmental Protection Agency (IEPA).

#### 2. Results of Sampling and Tests and Other Data

A. The Respondents submitted no sampling results or other test data during the September 2018 reporting period.

A. The Respondents submitted no work plans, procedures, or other deliverables during the September 2018 reporting period.

### 4. Actions Projected for the Next Reporting Period

- A. The Respondents will continue to work to address remaining technical issues for completing the RI and risk assessments.
- B. The Respondents will respond to any USEPA or IEPA comments on the work plan prepared by Arcadis U.S., Inc. (Arcadis) and submitted August 31, 2018 regarding surface water sampling in Indian Ridge Marsh to assess the potential impacts to the marsh from constituents in groundwater emanating from the Site.
- C. Arcadis will prepare a technical memorandum that summarizes regional and Sitespecific geologic and hydrogeologic information about the confining layer and groundwater in deeper units below the confining layer.
- D. Arcadis will review and evaluate the information provided by IEPA in reply to the Respondents' Freedom of Information Act request

### 5. Progress and Schedule Report

- A. On behalf of the Respondents, Arcadis has completed the RI Site characterization studies as defined in the RI/FS Work Plan, as well as ancillary Site investigation activities (e.g., seep inspection, light non-aqueous phase liquid sampling).
- B. The schedule date for completing the RI was extended to accommodate four rounds of quarterly groundwater sampling rather than the one round envisioned in the schedule submitted with the RI/FS Work Plan.
- C. Pending an agreement on next steps, the Respondents will work with USEPA to update the schedule for completing the RI and risk assessments.

We trust that this submittal satisfies your requirements at this time. If you have questions regarding this progress report or related project matters, please do not hesitate to contact me.

Respectfully submitted,

Leo M. Brausch Project Coordinator

LMB:

Ms. Shari Lynn Kolak October 10, 2018 Page 3

## cc (via email):

- S. M. Franzetti, Esq.
- J. Kratzmeyer, Arcadis
- P. Lake, IEPA (plus two hard copies) LCCS Technical Committee

5318 Alexa Road

Charlotte, NC 28277-0518

Office: (704) 246-7266

Cell: (412) 720-8549 Fax: (980) 339-3017

Email: lbrausch@brauschenv.com

#### Via Electronic and First-Class Mail

November 9, 2018

Ms. Shari Lynn Kolak Remedial Project Manager Superfund Division U.S. Environmental Protection Agency, Region 5 77 West Jackson Boulevard, SRF-5J Chicago, IL 60604-3507

Re: Monthly Progress Report for October 2018
Remedial Investigation and Feasibility Study
Lake Calumet Cluster Site, Operable Unit 2, Chicago, Illinois

Dear Ms. Kolak:

The Respondents submit this monthly progress report to the U.S. Environmental Protection Agency (USEPA), Region 5, pursuant to Paragraph 46 of the Administrative Settlement Agreement and Order on Consent (AOC) and attached Statement of Work for the Operable Unit 2 (OU2) Remedial Investigation and Feasibility Study (RI/FS) at the Lake Calumet Cluster Site in Chicago, Illinois (the Site). This progress report summarizes efforts by the Respondents to fulfill the requirements of the AOC during the October 2018 reporting period.

#### 1. Activities Completed During This Reporting Period

- A. On October 10, 2018, the Respondents submitted the September 2018 monthly progress report to USEPA with copies to the Illinois Environmental Protection Agency (IEPA).
- B. On October 31, 2018, the Respondents submitted to USEPA and IEPA a technical memorandum prepared by Arcadis U.S., Inc. (Arcadis) that compiles geologic information on the silty clay unit at the Site that acts as a barrier to groundwater flow from the shallow waste fill to the bedrock aquifer. The memorandum also presents information on the nearby Chicago Tunnel and Reservoir Plan (TARP) tunnel and the effects of this tunnel on the hydraulics and chemistry of the bedrock aquifer at the Site.

### 2. Results of Sampling and Tests and Other Data

A. The Respondents submitted no sampling results or other test data during the October 2018 reporting period.

#### 3. Work Plans, Procedures, and Deliverables

- A. On October 31, 2018 the Respondents submitted the technical memorandum described in Item 1.B above.
- B. The Respondents submitted no other work plans, procedures, or deliverables during the October 2018 reporting period.

#### 4. Actions Projected for the Next Reporting Period

- A. The Respondents will continue to work to address remaining technical issues for completing the RI and risk assessments.
- B. The Respondents will address any USEPA or IEPA comments on the work plan prepared by Arcadis and submitted August 31, 2018 regarding surface water sampling in Indian Ridge Marsh to assess the potential impacts to the marsh from constituents in groundwater emanating from the Site.<sup>1</sup>
- C. The Respondents will address any USEPA or IEPA comments on the technical memorandum prepared by Arcadis and submitted October 31, 2018 compiling geologic information on the silty clay unit at the Site that acts as a confining layer and the effects of the TARP tunnel on the hydraulics and chemistry of the bedrock aquifer.
- D. Arcadis will review and evaluate the information provided by IEPA in reply to the Respondents' Freedom of Information Act request

#### 5. Progress and Schedule Report

- A. On behalf of the Respondents, Arcadis has completed the RI Site characterization studies as defined in the RI/FS Work Plan, as well as ancillary Site investigation activities (e.g., seep inspection, light non-aqueous phase liquid sampling).
- B. The schedule date for completing the RI was extended to accommodate four rounds of quarterly groundwater sampling rather than the one round envisioned in the schedule submitted with the RI/FS Work Plan.

<sup>&</sup>lt;sup>1</sup> From its initial review, USEPA indicated that an addendum to the Quality Assurance Project Plan (QAPP) will be needed to address those sampling activities not covered in the current QAPP.

Ms. Shari Lynn Kolak November 9, 2018 Page 3

C. Pending an agreement on next steps, the Respondents will work with USEPA to update the schedule for completing the RI and risk assessments.

\* \* \* \*

We trust that this submittal satisfies your requirements at this time. If you have questions regarding this progress report or related project matters, please do not hesitate to contact me.

Respectfully submitted,

Leo M. Brausch Project Coordinator

LMB:

cc (via email):

S. M. Franzetti, Esq.

J. Kratzmeyer, Arcadis

P. Lake, IEPA (plus two hard copies)

5318 Alexa Road

Charlotte, NC 28277-0518

Office: (704) 246-7266

Cell:

(412) 720-8549

Fax:

(980) 339-3017

Email:

lbrausch@brauschenv.com

#### Via Electronic and First-Class Mail

December 9, 2018

Ms. Shari Lynn Kolak Remedial Project Manager Superfund Division U.S. Environmental Protection Agency, Region 5 77 West Jackson Boulevard, SRF-5J Chicago, IL 60604-3507

**Monthly Progress Report for November 2018** Re:

Remedial Investigation and Feasibility Study

Lake Calumet Cluster Site, Operable Unit 2, Chicago, Illinois

Dear Ms. Kolak:

The Respondents submit this monthly progress report to the U.S. Environmental Protection Agency (USEPA), Region 5, pursuant to Paragraph 46 of the Administrative Settlement Agreement and Order on Consent (AOC) and attached Statement of Work for the Operable Unit 2 (OU2) Remedial Investigation and Feasibility Study (RI/FS) at the Lake Calumet Cluster Site in Chicago, Illinois (the Site). This progress report summarizes efforts by the Respondents to fulfill the requirements of the AOC during the November 2018 reporting period.

#### 1. **Activities Completed During This Reporting Period**

On November 9, 2018, the Respondents submitted the October 2018 monthly Α. progress report to USEPA with copies to the Illinois Environmental Protection Agency (IEPA).

#### 2. Results of Sampling and Tests and Other Data

A. The Respondents submitted no sampling results or other test data during the November 2018 reporting period.

A. The Respondents submitted no work plans, procedures, or deliverables during the November 2018 reporting period.

#### 4. Actions Projected for the Next Reporting Period

- A. The Respondents will continue to work to address remaining technical issues for completing the RI and risk assessments.
- B. The Respondents will address any USEPA or IEPA comments on the work plan prepared by Arcadis and submitted August 31, 2018 regarding surface water sampling in Indian Ridge Marsh to assess the potential impacts to the marsh from constituents in groundwater emanating from the Site.<sup>1</sup>
- B. The Respondents will address any USEPA or IEPA comments on the technical memorandum prepared by Arcadis and submitted October 31, 2018 compiling geologic information on the silty clay unit at the Site that acts as a confining layer and the effects of the nearby Chicago Tunnel and Reservoir Plan (TARP) tunnel on the hydraulics and chemistry of the bedrock aquifer at the Site.
- C. Arcadis will review and evaluate the information provided by IEPA in reply to the Respondents' Freedom of Information Act request

#### 5. Progress and Schedule Report

- A. On behalf of the Respondents, Arcadis has completed the RI Site characterization studies as defined in the RI/FS Work Plan, as well as ancillary Site investigation activities (e.g., seep inspection, light non-aqueous phase liquid sampling).
- B. The schedule date for completing the RI was extended to accommodate four rounds of quarterly groundwater sampling rather than the one round envisioned in the schedule submitted with the RI/FS Work Plan.
- C. Pending an agreement on next steps, the Respondents will work with USEPA to update the schedule for completing the RI and risk assessments.

\* \* \* \*

<sup>&</sup>lt;sup>1</sup> From its initial review, USEPA indicated that an addendum to the Quality Assurance Project Plan (QAPP) will be needed to address those sampling activities not covered in the current QAPP.

Ms. Shari Lynn Kolak December 9, 2018 Page 3

We trust that this submittal satisfies your requirements at this time. If you have questions regarding this progress report or related project matters, please do not hesitate to contact me.

Respectfully submitted,

Leo M. Brausch Project Coordinator

LMB:

cc (via email):

S. M. Franzetti, Esq.

J. Kratzmeyer, Arcadis

P. Lake, IEPA (plus two hard copies)

5318 Alexa Road

Charlotte, NC 28277-0518

Office: (704) 246-7266 Cell: (412) 720-8549 Fax: (980) 339-3017

Email: lbrausch@brauschenv.com

Via Electronic and First-Class Mail

January 10, 2019

Ms. Shari Lynn Kolak Remedial Project Manager Superfund Division U.S. Environmental Protection Agency, Region 5 77 West Jackson Boulevard, SRF-5J Chicago, IL 60604-3507

Re: Monthly Progress Report for December 2018
Remedial Investigation and Feasibility Study
Lake Calumet Cluster Site, Operable Unit 2, Chicago, Illinois

Dear Ms. Kolak:

The Respondents submit this monthly progress report to the U.S. Environmental Protection Agency (USEPA), Region 5, pursuant to Paragraph 46 of the Administrative Settlement Agreement and Order on Consent (AOC) and attached Statement of Work for the Operable Unit 2 (OU2) Remedial Investigation and Feasibility Study (RI/FS) at the Lake Calumet Cluster Site in Chicago, Illinois (the Site). This progress report summarizes efforts by the Respondents to fulfill the requirements of the AOC during the December 2018 reporting period.

#### 1. Activities Completed During This Reporting Period

A. On December 9, 2018, the Respondents submitted the November 2018 monthly progress report to USEPA with copies to the Illinois Environmental Protection Agency (IEPA).

#### 2. Results of Sampling and Tests and Other Data

A. The Respondents submitted no sampling results or other test data during the December 2018 reporting period.

#### 3. Work Plans, Procedures, and Deliverables

A. The Respondents submitted no work plans, procedures, or deliverables during the December 2018 reporting period.

## 4. Actions Projected for the Next Reporting Period

- A. The Respondents will continue to work to address remaining technical issues for completing the RI and risk assessments.
- B. The Respondents will address any USEPA and IEPA comments received on the work plan prepared by Arcadis and submitted August 31, 2018 regarding surface water sampling in Indian Ridge Marsh to assess the potential impacts to the marsh from constituents in groundwater emanating from the Site.
- C. The Respondents will address any USEPA or IEPA comments received on the technical memorandum prepared by Arcadis and submitted October 31, 2018 compiling geologic information on the silty clay unit at the Site that acts as a confining layer and the effects of the nearby Chicago Tunnel and Reservoir Plan (TARP) tunnel on the hydraulics and chemistry of the bedrock aquifer at the Site.
- D. Arcadis will review and evaluate the information provided by IEPA in reply to the Respondents' Freedom of Information Act request.

#### 5. Progress and Schedule Report

- A. On behalf of the Respondents, Arcadis has completed the RI Site characterization studies as defined in the RI/FS Work Plan, as well as ancillary Site investigation activities (e.g., seep inspection, light non-aqueous phase liquid sampling).
- B. The schedule date for completing the RI was extended to accommodate four rounds of quarterly groundwater sampling rather than the one round envisioned in the schedule submitted with the RI/FS Work Plan.
- C. Pending an agreement on next steps, the Respondents will work with USEPA to update the schedule for completing the RI and risk assessments.

We trust that this submittal satisfies your requirements at this time. If you have questions regarding this progress report or related project matters, please do not hesitate to contact me.

Respectfully submitted,

Leo M. Brausch Project Coordinator

LMB:

Ms. Shari Lynn Kolak January 10, 2019 Page 3

## cc (via email):

- S. M. Franzetti, Esq.
- J. Kratzmeyer, Arcadis
- P. Lake, IEPA (plus two hard copies) LCCS Technical Committee